

Patent Abstracts of Japan

PUBLICATION NUMBER : 55127720
PUBLICATION DATE : 02-10-80

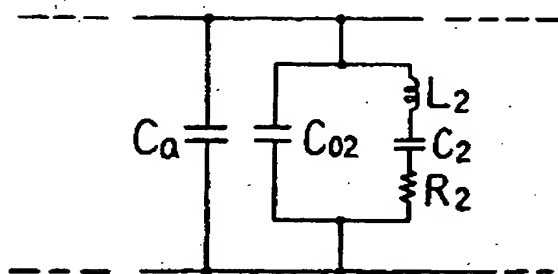
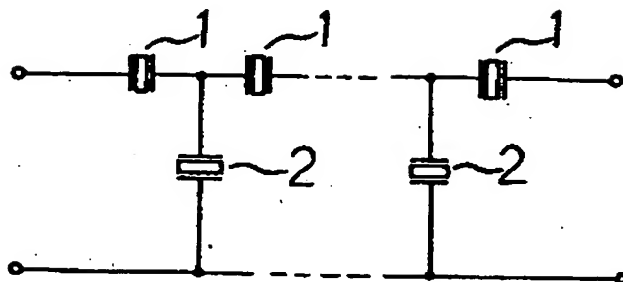
APPLICATION DATE : 27-03-79
APPLICATION NUMBER : 54035038

APPLICANT : TOHOKU METAL IND LTD;

INVENTOR : TSUDA BUNSHIRO;

INT.CL. : H03H 9/58

TITLE : LADDER-TYPE CERAMIC FILTER



ABSTRACT : PURPOSE: To improve a spuriousness by using vibrators, which utilize length vibration of rectangular plates of a ratio of length to width of 2 or more, as series resonators and parallel resonators of a ladder-type ceramic filter and by connecting capacitors to parallel resonators.

CONSTITUTION: Plural series resonators 1 and parallel resonators 2 are combined to constitute a ladder-type ceramic filter, and piezo-electric vibrators which utilize length vibration of rectangular plates of a side ratio of 2 or more are used as both resonators. By setting the side ratio to 2 or more, the effective coupling coefficient can be 90% or more, and the area of the rectangular plate becomes one third or less of the area of a square plate, so that the filter can be small-size. Since the capacity ratio becomes large because the stopping attenuation quantity of the normalized filter characteristic is enlarged, a capacity about 10 times as large as the capacity of the series resonator is required for the capacity of the parallel resonator, and capacitor Ca is added in parallel to the parallel resonator. As a result, no spuriousness is generated from main resonance frequency 455kHz to 1MHz.

COPYRIGHT: (C)1980,JPO&Japio